Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-13.   (Cancelled).

14.   (Currently Amended) A pen-based computing system for estimating the orientation of a segment of digital ink, the system including a pen-based computing pen to input digital ink, and a processor adapted to estimate the orientation of a segment of digital ink by measuring the azimuth of the pen at a sampling rate during writer generation of the segment of digital ink, determining an average azimuth for all of the sampled points, and estimating the orientation of the segment of digital ink using the by subtracting the determined average azimuth from each measured azimuth of the pen at each sampled pointspoint.

15. – 16. (Cancelled)

17.   (New) A system as claimed in claim 14, wherein the processor is further adapted to use the estimated orientation of the segment of digital ink in a digital ink line orientation normalization technique.

18.   (New) A system as claimed in claim 14, wherein the processor is further adapted to use a single, fixed orientation estimation for a line of digital ink.

19.   (New) A system as claimed in claim 14, wherein the processor is further adapted to use an orientation estimation that varies across a line of digital ink.

20.   (New) A system as claimed in claim 14, wherein the processor is further adapted to normalize the estimated orientation to be within the range of 0° to 360°.

21.   (New) A system as claimed in claim 14, wherein the segment of digital ink is more than one character of digital ink.

22.   (New) A system as claimed in claim 14, wherein the segment of digital ink is a line segment.

23.   (New) A system as claimed in claim 22, wherein the processor is further adapted to perform line segmentation by measuring a change in azimuth value.

24.   (New) A system as claimed in claim 14, wherein the processor is further adapted to use a writer independent handwriting model to estimate the orientation.

25.   (New) A system as claimed in claim 14, wherein the processor is further adapted to use a writer dependent handwriting model trained using sample digital ink input by the writer to estimate the orientation.

26.   (New) A system as claimed in claim 25, wherein the writer dependent handwriting model is trained using sample digital ink input by the writer using a consistent baseline.

27.   (New) A system as claimed in claim 25, wherein the writer dependent handwriting model is trained using arbitrary sample digital ink input by the writer.